



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,597	08/23/2003	Edwin Joseph Selker	D-15	9798
21253	7590	12/29/2005	EXAMINER	
CHARLES G. CALL 68 HORSE POND ROAD WEST YARMOUTH, MA 02673-2516			FUREMAN, JARED	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/646,597	SELKER, EDWIN JOSEPH	
	Examiner	Art Unit	
	Jared J. Fureman	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9, 11-13, 15, 17, 19-25 and 32-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9, 11-13, 15, 17, 19-25 and 32-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt is acknowledged of the amendment filed on 10/16/2005, which has been entered in the file. Claims 9, 11-13, 15, 17, 19-25 and 32-36 are pending.

Claim Objections

1. Claim 36 is objected to because of the following informalities: Claim 36, line 3, "said" should be replaced with --an--, in order to avoid a lack of proper antecedent basis for "said object". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 9, 11-13, 15, 21-24 and 32-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Giesler (US 6,424,029 B1, previously cited).

Giesler teaches:

Re claim 9: An RFID card (a chip card, see figures 1 and 3-5) adapted to be carried by and activated by a human cardholder comprising, in combination,

a transceiver (the data-processing circuit 1 functions as a transceiver for receiving and transmitting data signals via the antenna coil 2, see column 3, lines 50-57) on said card for exchanging data between said RFID card and a remotely located card reader (a reader, see column 6, lines 48-51) electromagnetically coupled to said card,

at least one sensor (evaluation circuit 9, in combination with data-processing circuit 1, see column 3, line 50 - column 4, line 35) on said card operable by said cardholder to generate a plurality of control signals indicating the timing (the use of menu-controls suggests that the control signals indicate the timing of the user's touch, the sequence of touches for example, see column 3, lines 8-16 and column 5, lines 17-27) of a corresponding sequence of touch events when said card is being manipulated by said cardholder (the use of menu-controls suggests that the control signals indicate the sequence of touches, see column 3, lines 8-16 and column 5, lines 17-27), and

means (the data-processing circuit 1, see column 3, line 50 - column 4, line 35) responsive to said control signals for controlling the data exchanged between said RFID card and said card reader when said timing satisfies a predetermined condition (for example, the combination of touches, in a predetermined sequence, selects a menu option and controls the transmission of data signals, see column 3, lines 13-14, and column 5, lines 17-27).

Re claim 11: An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 9 wherein said control signals further indicate the

Art Unit: 2876

location on said card where said touch events occur (the location of the touch zones 12 and 13, for example, see column 3, line 66 - column 4, line 23).

Re claim 12: An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 11 wherein said sensor comprises a plurality of switching elements (conductor structures 10 and 11 include conductor configurations 14, 15 and 16, 17, respectively, see column 4, lines 2-6) located at different positions on the surface of said card (see figures 1 and 3-5).

Re claim 13: An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 12 wherein said transceiver is electromagnetically coupled to said card reader by an antenna and wherein each of said plurality of switching elements are connected to said antenna to vary the gain or resonant frequency of said antenna (the change in capacitance will vary, at least to some extent, the gain or resonant frequency of the antenna, see figures 1, 3-5, column 3, line 50 - column 4, line 64).

Re claim 15: An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 11 wherein said switching elements are activated by selective positioning of the cardholder's hand with respect to said card (see column 3, lines 8-16, and column 5, lines 18-27).

Re claim 21: An RFID card (a chip card, see figures 1 and 3-5) adapted to be carried by and activated by a human cardholder comprising an on-card antenna (antenna coil 2, see column 3, line 57) defining of a plurality of spaced apart regions (figure 1 shows antenna coil 2 and touch zones 12 and 13 forming a plurality of spaced apart regions, see figure 1 and column 4, lines 2-4) of said RFID card and having a different response to the presence of a conductive object (the user's finger or thumb, for example, see column 3, lines 8-16) positioned proximate to different ones of said regions (touch zones 12 and 13, for example, see column 4, lines 2-4) of said card and sensing means (the combination of conductor configurations 14, 15 and 16, 17 and evaluation circuit 9, see column 3, line 66 - column 4, line 35) coupled to said antenna for detecting the timing and sequence in which said conductive object moves with respect to said spaced apart regions (the use of menu-controls suggests that the control signals indicate the timing of the user's touch, the sequence of touches for example, see column 3, lines 8-16 and column 5, lines 17-27), and means for controlling the operations of said RFID card when said timing and sequence satisfies a predetermined condition (for example, the combination of touches, in a predetermined sequence, selects a menu option and controls the transmission of data signals, see column 3, lines 13-14, and column 5, lines 17-27).

Re claim 22: An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 21 wherein said sensing means detects a change in the Q of said antenna in the presence of said object (the change in capacitance will vary, at

Art Unit: 2876

least to some extent, the Q of the antenna, see figures 1, 3-5, column 3, line 50 - column 4, line 64).

Re claim 23: An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 21 wherein said sensing means detects a change in the amplitude gain of said antenna in the presence of said object (see column 4, line 65 - column 5, line 4).

Re claim 24: An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 21 wherein said conductive object is a human hand (see column 3, lines 8-16).

Re claim 32: A radio operated data card (a chip card, see figures 1 and 3-5) carried by and activated by a human cardholder including, on said card,

an antenna (antenna coil 2, see column 3, line 57),

a data memory (data-processing circuit 1 necessarily includes a data memory in order to receive, process and transmit data, see column 3, lines 50-57)

a transceiver (the portions of data-processing circuit 1 which allow the data-processing circuit to receive and transmit data signals via the antenna coil 2, see column 3, lines 50-57) for transferring data between said memory and a remote host system (a reader, see column 6, lines 48-51) via said antenna,

a sensing mechanism (evaluation circuit 9, in combination with data-processing circuit 1, see column 3, line 50 - column 4, line 35) for generating control signals indicative of the position at which, and the timing at which (the use of menu-controls suggests that the control signals indicate the timing of the user's touch, the sequence of touches for example, see column 3, lines 8-16 and column 5, lines 17-27), said cardholder touches each of a plurality of different locations (the location of the touch zones 12 and 13, for example, see column 3, line 66 - column 4, line 23) on said card in sequence, and

means (means within the data-processing circuit 1, see column 3, line 50 - column 4, line 35) for controlling the transfer of data via said transceiver when said control signals satisfy predetermined conditions indicating that said card was touched at predetermined locations in a predetermined sequence having a predetermined timing (for example, the combination of touches, in a predetermined sequence, selects a menu option and controls the transmission of data signals, see column 3, lines 13-14, and column 5, lines 17-27).

Re claim 33: A radio operated data card as set forth in claim 32 wherein said antenna comprises different segments (figure 1 shows antenna coil 2 and touch zones 12 and 13 forming a plurality of different segments, see figure 1 and column 4, lines 2-4) and wherein said sensing mechanism detects a change in the Q of said antenna in the presence of said object (the change in capacitance will vary, at least to some extent, the Q of the antenna, see figures 1, 3-5, column 3, line 50 - column 4, line 64).

Re claim 34: A radio operated data card as set forth in claim 32 wherein said antenna comprises different segments (figure 1 shows antenna coil 2 and touch zones 12 and 13 forming a plurality of different segments, see figure 1 and column 4, lines 2-4) and wherein said sensing mechanism detects a change in the standing wave ratio exhibited by said two or more antenna segments in the presence of said object (the change in capacitance will vary, at least to some extent, the standing wave ratio of the antenna, see figures 1, 3-5, column 3, line 50 - column 4, line 64).

Re claim 35: A radio operated data card as set forth in claim 32 wherein said antenna comprises different segments (figure 1 shows antenna coil 2 and touch zones 12 and 13 forming a plurality of different segments, see figure 1 and column 4, lines 2-4) and wherein said sensing mechanism detects a change in the amplitude gain of said one or more antenna segments in the presence of said object (see column 4, line 65 - column 5, line 4).

Re claim 36: A radio operated data card as set forth in claim 32 wherein said antenna comprises different segments (figure 1 shows antenna coil 2 and touch zones 12 and 13 forming a plurality of different segments, see figure 1 and column 4, lines 2-4) and wherein said sensing mechanism a change in the resonant frequency of said one or more antenna segments in the presence of an object (the user's finger or thumb, for example, see column 3, lines 8-16) (the change in capacitance by the presence of the

Art Unit: 2876

user's finger or thumb will vary, at least to some extent, the resonant frequency of the antenna, see figures 1, 3-5, column 3, line 50 - column 4, line 64).

4. Claims 17, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Umeno et al (JP 7-249109 A, previously cited).

Umeno et al teaches:

Re claim 17: A data card (non-contact IC card 1, see figure 1 and the translation of the abstract) carried by a cardholder including an integrated circuit (within IC card 1) and a plurality of sensors (the keys, see figure 1, represent a plurality of sensors) positioned on a surface of said card forming a data entry keypad defining at least ten digit entry key positions (see the keys labeled 0-9, on the surface of the IC card 1, shown in figure 1) which may be touched by said cardholder to enter numeric data into said integrated circuit (also see the translation of the abstract).

Re claim 19. A data card carried by a cardholder as set forth in claim 17 wherein said data card further includes an antenna (the IC card 1 necessarily includes an antenna in order to communicate with reception antenna 3, see figure 1) for electromagnetically communicating data between said card and a remote reader (reception antenna 3 and personal computer 4, see figure 1 and the translation of the abstract).

Re claim 20. A data card carried by a cardholder as set forth in claim 17 wherein said data card further includes a communications circuit (the IC card 1 necessarily includes a

communication circuit for communicating with reception antenna 3, see figure 1) for exchanging information between said data card and a remote reader (reception antenna 3 and personal computer 4, see figure 1 and the translation of the abstract), and wherein said at least some of said information is entered by said cardholder using said data entry keypad (see the translation of the abstract).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Giesler in view of Tanaka (US 6,830,193 B2, previously cited).

The teachings of Giesler have been discussed above.

Giesler fails to specifically teach wherein said conductive object is a conductive member mounted on said card for movement with respect to said on-card antenna to alter the characteristics of said antenna.

Tanaka teaches an RFID card (IC card 3, see figures 10A and 10B) adapted to be carried by and activated by a human cardholder comprising an on-card antenna (loop antenna 5, see column 7, line 42) having a preferential response to the presence of a conductive object (crossover switch 12 including movable conductor 5", see figures 10A, 10B and column 7, lines 37-64) positioned proximate to a predetermined region of

said card (see figures 10A and 10B) and sensing means (IC chip 4) coupled to said antenna for detecting the presence of said object (the IC chip 4 will detect the presence of the object in the on state, figure 10A, by transmission/reception of data); wherein said conductive object is a conductive member (movable conductor 5") mounted on said card for movement with respect to said on-card antenna to alter the characteristics of said antenna (the movable conductor 5" either completes the loop antenna 5 or opens the loop antenna 5, see figures 10A, 10B and column 7, lines 37-64).

In view of Tanaka's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the RFID card as taught by Giesler, wherein said conductive object is a conductive member mounted on said card for movement with respect to said on-card antenna to alter the characteristics of said antenna; in order effectively prevent transmission and reception through the antenna when desired, thereby preventing undesired communication with the RFID card (see column 7, lines 54-64, of Tanaka).

Response to Arguments

7. Applicant's arguments filed 10/16/2005 have been fully considered but they are not persuasive.

In response to applicant's argument that Giesler fails to teach at least one sensor on said card operable by said cardholder to generate a plurality of control signals indicating the timing of a corresponding sequence of touch events and means responsive to the control signals for controlling the data exchanged between the RFID

Art Unit: 2876

card and said card reader when said timing satisfies a predetermined condition (see pages 11-12 of the amendment filed on 10/16/2005), the examiner respectfully disagrees. Giesler teaches a plurality of touch zones 12 and 13 which, in combination with evaluation circuit 9 of data-processing circuit 1, generate a plurality of control signals indicating a plurality of touches (see column 3, line 50 - column 4, line 35). The touch zones 12 and 13, and the data-processing circuit 1, control the exchange of data between the card and a remote reader. Giesler also teaches that combinations of touches are feasible (see column 3, lines 8-16) and the transmission of data signals may be menu-controlled (see column 5, lines 17-27). The use of menu-controls suggests, to one of ordinary skill in the art at the time of the invention, the detection of a sequence and timing of a plurality of touches at different locations (the touch zones 12 and 13) on the card. For example, at least one touch would be required to select or activate a menu, and at least one-second touch, occurring after the first touch, would be required to select a specific option from the menu. Thus, the selection of an option from the menu would require a plurality of touches in a predetermined timing/sequence in order to perform the desired option. Thus, it is believed that Giesler teaches/suggests the claimed limitations.

8. Applicant's arguments with respect to claim 17 have been considered but are moot in view of the new ground(s) of rejection. As discussed above, Umeno et al clearly teaches entry of numeric data through a ten key keypad on the surface of a data card.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Smola et al (US 6,690,556) teaches a data card.

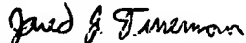
10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (571) 272-2391. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jared J. Fureman
Primary Examiner
Art Unit 2876

December 22, 2005